

SECTION 01500

CONSTRUCTION TEMPORARY FACILITIES AND TEMPORARY CONTROLS

1.1 DESCRIPTION

- A.** This section specifies the general requirements for furnishing, installing, operating and removing construction temporary facilities and temporary controls during construction.

1.2 TEMPORARY FACILITIES AND SERVICES DURING CONSTRUCTION

- A.** During the progress of the Work, provide all temporary facilities and services not limited to, the following:

1. Water Supply

- a. Make all arrangements for obtaining temporary water connections, and pay all costs thereby incurred. Furnish, install and pay for all piping and equipment required to provide water for the execution of the Work.
- b. Have location, material, and installation for all temporary piping lines and connections approved by the Owner. Water for construction purposes may be distributed by means of connections to the permanent system, if available when required, at the expense of the Contractor. Make connections for temporary water to comply with all applicable codes for buildings under construction and fire safety regulations. Remove temporary connections and restore the permanent system as approved by the Owner.
- c. Pay all costs of water until final acceptance of the Work.
- d. Provide drinking water with suitable cups for all personnel and workmen on the job.
- e. Remove the temporary water service at the completion of the Work.

2. Light and Power

- a. Provide and maintain, including power or fuel, sufficient lights for the safety of construction forces and to ensure the proper construction, inspection and prosecution of the Work, in addition to any lights necessary to protect the

Work or the traveling public (see Section 01560, Article 1.06 and Section 01570, Article 1.04).

- b. Make application to the local private utility company for the necessary temporary electric service (see Permits and Licenses Section of the General Conditions.
- c. Furnish and install all temporary wiring, extension cords, sockets, and all lamps, both initial and replacement, used for temporary power and lighting systems.
- d. Remove temporary power and lighting systems at completion of the Work.
- e. When permanent electrical power and lighting systems are in operating condition, said systems or portions thereof may be used, in lieu of the temporary service, for construction purposes, provided that the Contractor, (1) assumes full responsibility for the entire power and lighting systems, and (2) pays all costs for operation and restoration of the systems including relamping just prior to occupancy by the Owner.

3. Fire Protection

- a. Take all necessary precautions to prevent fires at the Work. Provide and maintain adequate facilities for extinguishing fires, taking special precautions in the storage and use of solvents, paints, adhesives, and other flammable materials. No on-site burning or storage of rubbish will be allowed.

4. Weather Protection and Heating During Construction

- a. Provide temporary, weather-tight enclosures and heat to permit construction work to be carried on during the months of November through March. These requirements are not to be construed as requiring enclosures or heat for operations that are economically infeasible to protect in the judgment of the Owner. Included in this category, without limitations, are such items as Site Work, Excavation, Pile Driving, Steel Erection, Erection of Certain Exterior Wall Panels, Roofing, and similar operations.
- b. "Weather protection" means the temporary protection of that Work adversely affected by moisture, wind and cold, by covering, enclosing, heating or a combination thereof. Provide adequate protected working areas during the months of November through March as determined by the

Owner and consistent with the approved construction schedule to permit the continuous progress of Work necessary to maintain an orderly and efficient sequence of construction operations. Furnish and install weather protection material and be responsible for costs, including heating required to maintain a minimum temperature of 40 deg F at the working surface. This provision does not supersede any specific requirements for methods of construction, curing of materials or the applicable General Conditions set forth in the Contract Documents with added regard to performance obligations of the Contractor.

- c. As necessary and within 30 days prior to its expected need, submit to the Owner in writing, for approval, three copies of proposed methods for weather protection and heating during the construction of those items requiring such protection.
- d. Installation and operation of weather protection and heating devices shall comply with safety regulations, including provisions for adequate ventilation and fire protection devices. Heating devices which may cause damage to finish surfaces shall not be used.
- e. Furnish and install one accurate Fahrenheit thermometer at each work area as designated by the Owner. Provide, one additional accurate Fahrenheit thermometer for every 2,000 square feet of floor space where the work areas exceed 2,000 square feet.
- f. Assume all risks of damage by the elements to the work under the Contract.
- g. Protect work carried on, or materials used in the work or stored during extreme weather, against freezing, drying, wetting, snow or other harmful conditions, and heat, cover, or protect as required by good practice or as directed by the Owner.
- h. Heating during construction shall mean providing protection from cold and moisture by covering, enclosing and heating materials and work under construction and providing suitable working conditions in all areas for all trades employed on the work. Provide all heating during construction and pay costs, including fuel, incurred. Supply and maintain means of properly heating the facility until it is accepted.

- i. For facilities and areas not presently being heated from existing sources, and as a result of construction, provide heating and ventilation in enclosed areas within the contract limit lines from the time of enclosure until the acceptance of the Project. The temperature shall:
 - 1) not be less than specified in any section of the Specification.
 - 2) not be less than that recommended by the manufacturers of the materials incorporated in the Project, whether specified in the pertinent section or not.
 - 3) be made available sufficiently in advance of any predetermined operation requiring advance heating before operations commence.
 - 4) not be less than required for the protection of all installed work as determined by the Specifications or determined by the Owner within the range of not less than 55 deg F nor more than 75 deg F.
 - 5) The ventilation shall be adequate for:
 - a) the areas (volumes involved).
 - b) the personnel employed therein.
 - c) the operations planned, under execution or executed.
 - d) the insuring of no adverse toxic conditions.
 - 6) Heat and ventilation within buildings shall be, at all times, uniform and constant and shall have such controls as to insure this requirement, regardless of variances in external temperatures.
- j. Where the Contract includes more than one building, temporary heating shall be provided for each building, in accordance with the above provisions
- k. The permanent heating system may be utilized for temporary heat if specifically authorized by the Owner.
- l. Salamanders shall be allowed for unenclosed form of work and structural concreting operations only with the approval

of the Owner.

- m. Unit heaters or other methods of heating shall meet with the approval of the Owner. Install unit heaters and other heating equipment and operate in such a way that finished work will not be damaged. Any surface damaged by the use of unit heaters or other heating methods selected by the Contractor shall be repaired or refinished to the satisfaction of the Owner at no cost to the Owner.
- n. Provide operating labor for continuous direct attendance, including frequent inspection of the system, emergency repairs, and keeping of temperature records. Continuous direct attendance shall include Saturdays, Sundays, and holidays, throughout the progress of the Work, unless otherwise permitted by the Owner and so certified in writing.

1.3 SANITARY PROVISIONS

- A. Provide and maintain in a neat and sanitary condition, properly secluded, such accommodations for employees as may be necessary to conform to the Commonwealth of Massachusetts Department of Public Health Sanitary Code and all local by-laws and ordinances. Necessary conveniences, properly secluded, shall be provided and maintained for the use of the Owner, satisfactory to the Owner and sanitary authorities. No public nuisance will be tolerated.

1.4 MEASUREMENT AND PAYMENTS

- A. No separate measurement or payment will be made for work required under this section. All costs in connection therewith will be considered incidental to the item or items of work to which they pertain.

END OF SECTION